FECN11 CWIS 171800

THIRTY DAY FORECAST FOR THE GREAT LAKES FOR MID-MARCH TO MID-APRIL ISSUED JOINTLY BY THE CANADIAN ICE SERVICE OF ENVIRONMENT CANADA AND THE U.S. NATIONAL ICE CENTER OF THE UNITED STATES ON 17 MARCH 2004.

Lake Superior

Above normal temperatures prevailed over the area during the first half of March. The current ice situation is about two weeks earlier than normal in terms of break-up.

Forecast ice conditions from March 17th to March 31st.

Temperatures will be near normal for the last half of March.

- 1. Thunder Bay the western portion will gradually fracture during the period. By the end of the month the western portion of the bay will be mostly open water.
- 2. Nipigon and Black Bays Only some ice fracture will occur near the entrance to the bays.
- 3. From north of Isle Royale northeastward towards Marathon to become open water during the last week of March. Occasional new ice formation that will melt rapidly.
- 4. Southern Lake Superior west of Keweenaw Peninsula Continued ice melt. At the end of the month, generally open water except for fractured consolidated ice around the Apostles Islands.
- 5. Southern Lake Superior east of the Keweenaw Peninsula Continued ice melt. By month's end only close pack thick lake ice will be present in Keweenaw Bay and around Grand Island.
- 6. Whitefish Bay Consolidated ice will fracture from the entrance eastward. By the end of the period, most of the consolidated ice will be fractured except along the eastern shore of the Bay. The rest of the bay will have close to very close pack thick lake ice
- 7. From Whitefish Bay northwards to Michipicoten Bay Most of the ice will be melted except for isolated patches of close pack to open drift persisting at the end of the month
- 8. Elsewhere in Lake Superior Open water to ice free.

Forecast ice conditions from April 1st to April 15th.

Temperatures will be above normal over the entire area.

- 1. Thunder Bay Most of the ice will be fractured and melted by mid-April except for a small patch of consolidated thick lake ice in extreme northeastern part of the bay.
- 2. Nipigon and Black Bays Ice to gradually fractured during the period.
- 3. Southern Lake Superior west of the Keweenaw Peninsula Ice around the Apostle Island will be gone by the second week of April.
- 4. Southern Lake Superior east of Keweenaw Peninsula Open water over the entire area by the end of the first week of April.
- 5. Whitefish Bay Entire area will have fractured ice during the first week of April. Patches of open drift to close pack thick lake ice will persist at the end of the period.
- 6. From Whitefish Bay to Michipicoten Bay Open water over the entire area during the first week of April.

7. Elsewhere in Lake Superior – Open water to ice free.

Lake Huron and Georgian Bay

Temperatures were above normal during the first half of March. Ice extent was less than normal and current conditions are about one week to 10 days earlier in terms of breakup.

Forecast ice conditions from March 17th to March 31st.

Temperatures will be near to slightly above normal for the last half of March over the area.

- 1. North Channel No significant changes anticipated during the period except for some melt between Cockburn and Drummond Islands.
- 2. St Mary's River Small open water areas will develop in St Mary's River during the next week and expend during the last week of the period.
- 3. Northwestern Lake Huron near the Straits of Mackinac The consolidated ice will fracture during the last week of March. Only open drift to close pack thick lake ice will be left at the end of the period.
- 4. Saginaw Bay The ice will continue to fracture during the third week of March. Most of the ice will melt during the last week of the month.
- 5. The eastern shore of Lake Huron The band of ice will continue to narrow and melt. By the end of the month, only a few patches of thick lake ice will be present.
- 6. Georgian Bay Continued deterioration of the ice in the central portion of the bay. By the end of the month, concentrations will be open to very open drift. The consolidated ice along the northeastern shore will decrease in extent during the period.
- 7. Elsewhere in Lake Huron Open water.

Forecast ice conditions from April 1st to April 15th.

Temperatures will be above normal for the entire area.

- North Channel The central portion of the North Channel will begin to break-up during the first week of April. By the end of the second week, areas of open water will have formed.
- 2. The St Mary's River will be fractured during the first week and significant areas of open water will be present by mid-April.
- 3. Northwestern Lake Huron near the Straits of Mackinac By the end of the first week of April, the area will be open water to ice free.
- 4. Saginaw Bay Open water will prevail over the entire bay early in the first week of April.
- 5. The eastern shore of Lake Huron Open water.
- 6. Georgian Bay By the end of the first week of April, all the fast ice will have fractured along the northern coast of Georgian Bay and melted by mid-month. Open water to ice free will prevail by mid-April.
- 7. Elsewhere in Lake Huron and Georgian Bay Open water to ice free.

Lake Erie and Lake St. Clair

Above normal temperature were observed over the region during the first two weeks of March. Break up is 5 to 7 days ahead of normal.

Forecast ice conditions from March 17th to March 31st.

Temperatures will be slightly above normal over the period.

- Eastern Lake Erie The ice edge will continue to progress eastward so that by the end of third week, the edge will be located east of Long Point. By the end of March, only a few patches of thick first year ice will be left in the extreme eastern portion of the lake. The fast ice along the northern shore east of Long Point Bay will fracture during the last week of the period.
- 2. The rest of Lake Erie, Western Basin, Lake St. Clair Ice free.

Forecast ice conditions from April 1st to April 15th.

Temperatures will be slightly above normal for the first two weeks of April.

- 1. Eastern Lake Erie Will become open water early in the first week of April.
- 2. The rest of Lake Erie, Western Basin and Lake St Clair Ice free.

Lake Ontario

Temperatures were much above normal over the lake during the past two weeks. The ice extent was near normal for this time of the year.

Forecast ice conditions from March 17th to March 31st.

Temperatures will be near to slightly above normal during the period.

- 1. Northeastern Lake Ontario The fast ice will gradually fracture during the period. A few patches of rotten thick lake ice will linger in the area by the end of the month.
- 2. Bay of Quinte The consolidated ice in the bay will fracture during the last week of March with some open water areas developing.
- 3. St Lawrence River The areas of fractured ice will continue to spread to the rest of the river. By the end of the third week of March, all the consolidated ice will be fractured, however concentrations will still be open drift to close pack.
- Elsewhere in Lake Ontario Ice free.

Forecast ice conditions from April 1st to April 15th.

Temperatures will be near to slightly above normal for the first half of April.

- Northeastern Lake Ontario Open water developing during the first week of April.
- 2. Bay of Quinte The ice will completely melt by the end of the first week of April.
- 3. St Lawrence River Open water developing early in the first week of April.
- Elsewhere in Lake Ontario Ice free.

Lake Michigan

Above normal temperature were observed over the first portion of March. Ice extent over the lake was near normal.

Forecast ice conditions from March 17th to March 31st.

Temperatures will be slightly above normal during the last two weeks of March.

- Green Bay Fracture of the consolidated ice will continue to progress southward from the northern section. By the end of the month, only the southern third of the bay and the Little and Big Bay de Noc will remained consolidated. The open water area in the northern section of the Bay will gradually expand.
- 2. Northeastern Lake Michigan The ice edge will continue to retreat eastward. By the end of the month, open drift thick lake ice will persist north and east of Beaver Island. The consolidated ice in the approaches to the Straits of Mackinac will fracture during the last week of March.
- 3. Elsewhere in Lake Michigan and in Grand Traverse bay- Mostly Ice free.

Forecast ice conditions from April 1st to April 15th.

Temperatures will be near normal over the area.

- Green Bay The consolidated ice in the southern portion of the bay as well as the Little and Big Bay de Noc will fracture in the first week of April. Ice in the rest of the bay will melt away. By the middle of the month, all of the bay area will be open water to ice free.
- 2. Northern Lake Michigan The area of ice will continue to shrink so that by mid-April open water conditions will prevail.
- 3. Elsewhere in Lake Michigan and in Grand Traverse bay Ice free.

Note: Changes have been implemented for the thirty day forecast to provide a product that will hopefully be easier to use. Please forward your comments to cis-scq.clients@ec.qc.ca.

Figure 1: Ice forecast, Western Great lakes - 1 April 2004

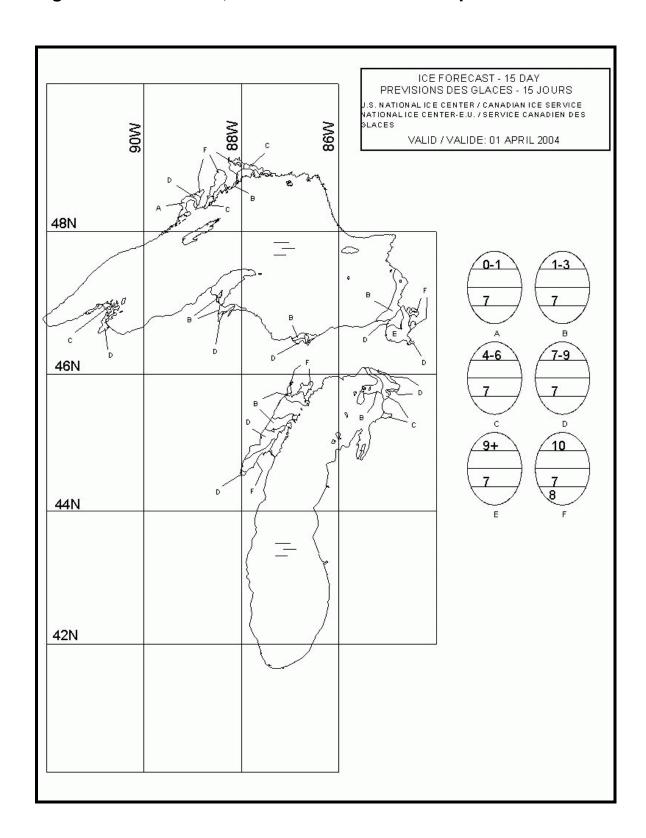


Figure 2: Ice forecast, Western Great lakes - 15 April 2004

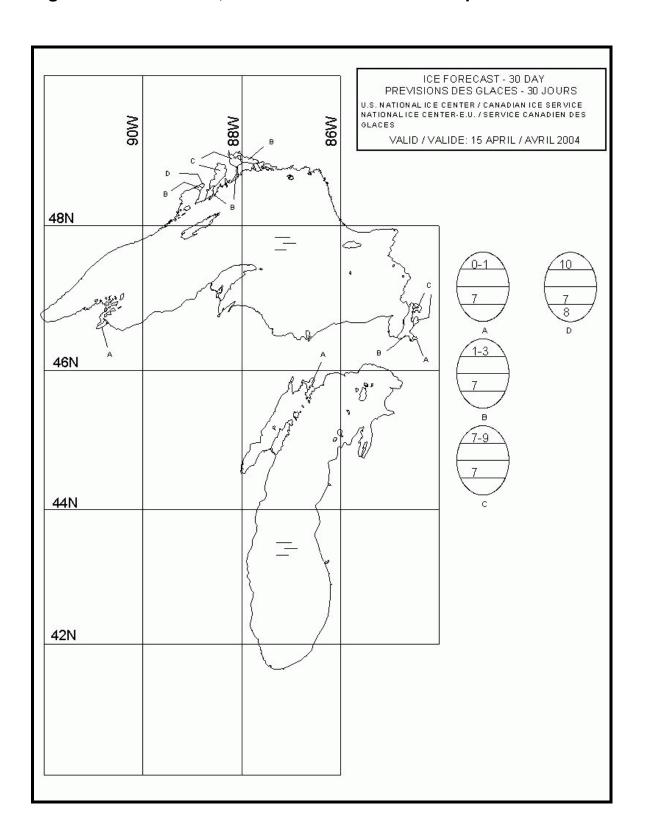


Figure 3: Ice forecast, Eastern Great lakes - 1 April 2004

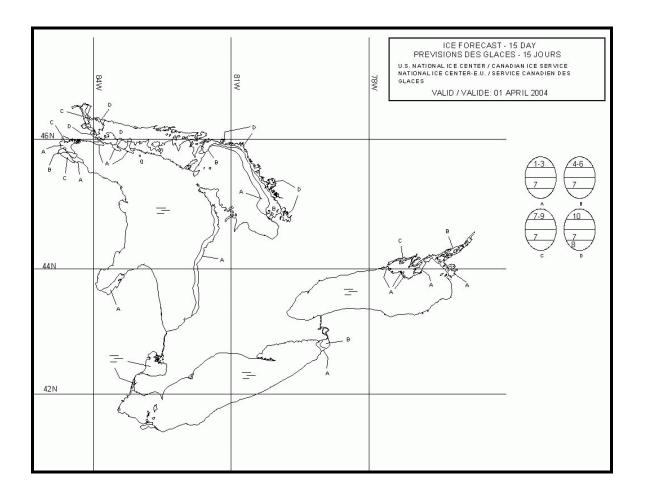
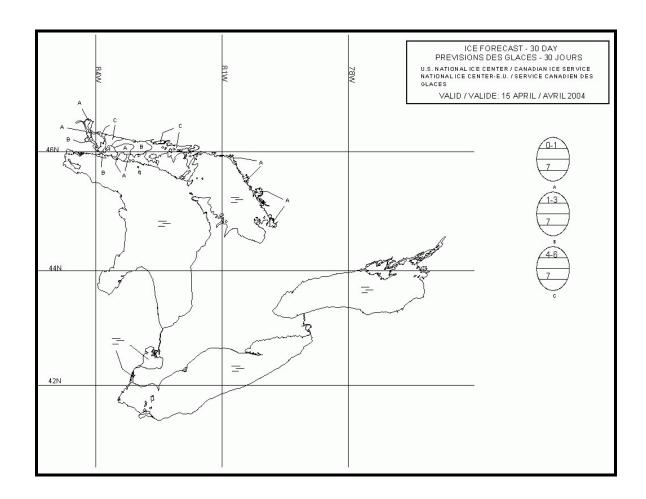


Figure 4: Ice forecast, Eastern Great lakes - 15 April 2004



THE NEXT 30 DAY FORECAST WILL BE ISSUED ON 05 APRIL 2004. END